


Galaxies & the Milky Way - Study Guide


1 - What is a galaxy? LARGE GROUP OF STARS & DUST HELD TOGETHER BY GRAVITY
TYPICALLY BELIEVED TO HAVE A MASSIVE BLACK HOLE IN THE CENTER

2 - What is the name of our galaxy & how many stars does it contain? MILKY WAY - 400 BILLION

3 - Name & describe the 3 types of galaxies. Give an example of each type (shape &/or Draw).

(BLURRED) SPIRAL - 

ELLIPTICAL -  FOOTBALL

IRREGULAR - 

4 - How do the planets orbit the sun? ELLIPSES

5 - Explain how galaxies form & what evidence supports this idea.

BIG BANG - LARGE EXPLOSION AND RAPID EXPANSION

6 - How long does it take the sun to revolve around the center of the Milky Way? 225 MILLION YEARS

7 - How fast is the sun traveling? 225 km/s Now, convert this into mph. (1 mile = 1.6 km)

$$\frac{225 \text{ km}}{\text{s}} \left(\frac{1 \text{ mi}}{1.6 \text{ km}} \right) = \left(\frac{3600 \text{ s}}{1 \text{ hr}} \right) = 506,250 \text{ mph}$$

8 - Draw a diagram of the Milky Way galaxy & indicate where the sun is located. (Rough sketch)



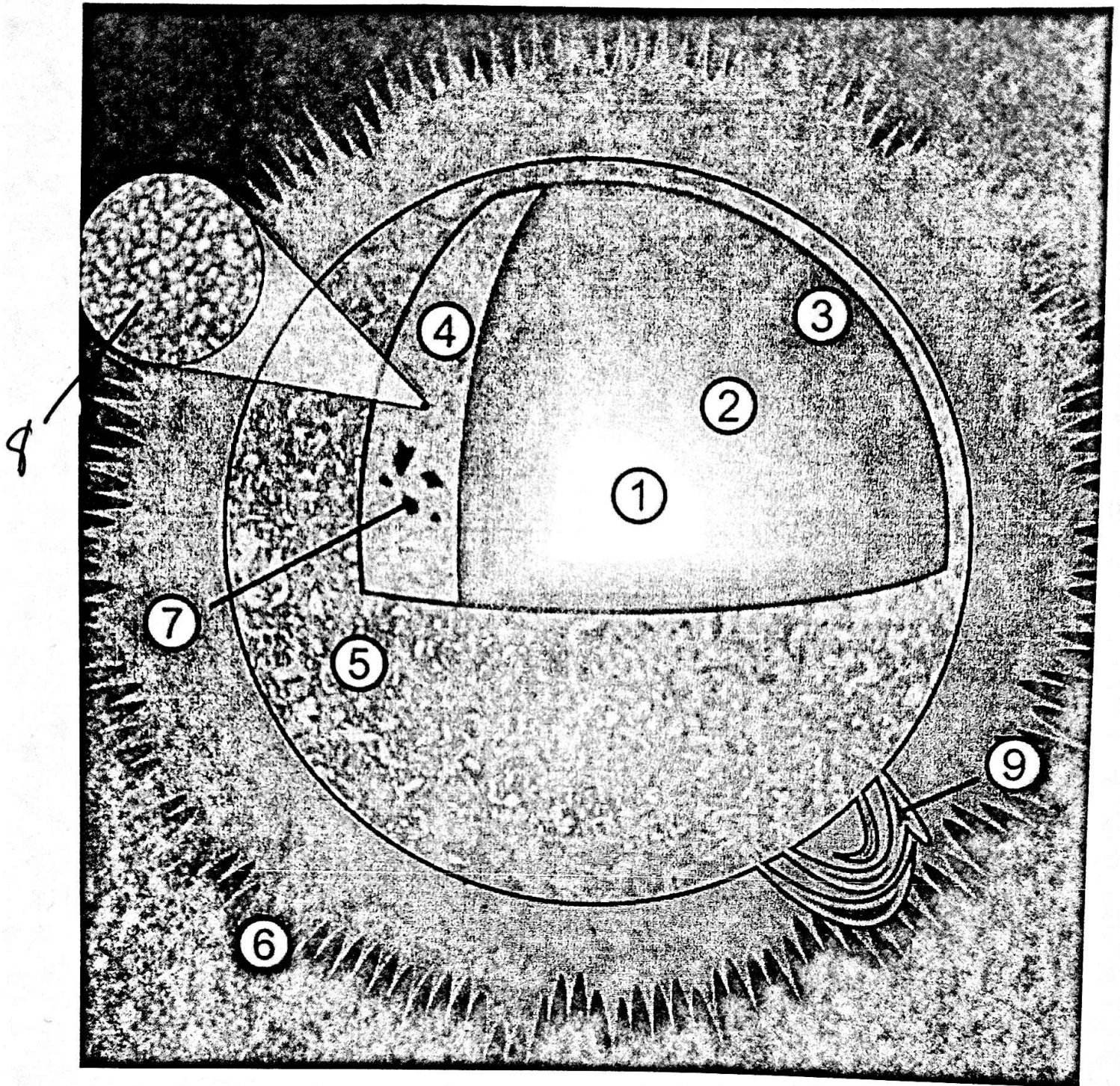
9 - What is thought to be at the center of the Milky Way? (Explain)

A MASSIVE BLACK HOLE -

10. What is the event horizon and what goes on there/ what do we think goes on there?

THE LINE WHERE OBJECTS GET SUCKED
POINT

IN BY BLACK HOLES



1. CORE

6. CORONA

2. RADIATION ZONE

7. SUNSPOT

3. CONVECTION ZONE

9. PROMINENCE

4. PHOTOSPHERE

5. CHROMOSPHERE